# Section 2: A National Water Quality Assessment

This section highlights information from an EPA fact sheet that summarizes the findings of the National Water Quality Inventory: 2000 Report, prepared under Section 305(b) of the Clean Water Act.

To assess water quality, states and other jurisdictions compare their monitoring results to the water quality standards they have set for their waters.

Water quality standards consist of three elements: the designated uses assigned to waters (such as drinking, swimming, or fishing), criteria to protect those uses (such as chemical-specific thresholds that should not be exceeded), and an antidegradation policy intended to keep waters that do meet standards from deteriorating from their current condition.

- *About 33% of U.S. waters were assessed for this national inventory of water quality.*

- *States, tribes, territories, and interstate commissions report that about 40% of streams, 45% of lakes, and 50% of estuaries that were assessed were not clean enough to support uses such as fishing and swimming.*

- *Leading causes of impairment in assessed waters include bacteria, nutrients, metals (primarily mercury), and siltation. Runoff from agricultural lands, municipal point sources (sewage treatment plants), and hydrologic modifications (such as channelization, flow regulation, and dredging) are the primary sources of impairment. Although the United States has made significant progress in cleaning up polluted waters over the past 30 years, much remains to be done to restore and protect the nation's waters.*

## Findings

The 2000 report is based on an assessment of approximately 700,000 miles of rivers and 17.34 million acres of lakes. States assessed about 31,000 square miles of estuaries.

Mercury was described as a leading cause of impairment in the nation's estuaries and lakes. Increasingly, states are moving toward more comprehensive examination of fish tissue and are issuing statewide advisories that restrict the consumption of some fish, especially for vulnerable segments of the population.

Mercury, which originates from air transport, from power-generating facilities and incinerators, mining, natural rock weathering, and other sources, was cited in 2,242 of the 2,838 fishing advisories reported by the states in 2000.

In addition, the states, tribes, territories, and jurisdictions assessed the quality of ocean and Great Lakes shoreline miles, wetlands, and ground water. Of the assessed ocean shoreline miles, 14% are impaired, primarily because of bacteria, oxygen depletion, and turbidity. Primary sources of pollution include urban runoff, storm sewers, nonpoint source runoff, and land disposal of wastes. States assessed only 6% of the nation's ocean shoreline miles.

States also found that 78% of assessed Great Lakes shoreline miles are impaired, primarily due to pollutants in fish tissue at levels that exceed standards to protect human health. States assessed 92% of Great Lakes shoreline miles.

The average annual loss of wetlands has decreased over the past 40 years to a current estimated loss of 58,500 acres per year. Nine states and tribes listed sources of recent wetland loss. Leading reasons for loss are filling and draining, conversion for agricultural uses, residential development, and road construction.

Overall, the states found that ground water quality is good and can support many different uses. However, measurable negative impacts have been detected in some areas and are commonly traced back to sources such as leaking underground storage tanks, septic systems, and landfills.

## For Further Information

For a copy of the National Water Quality Inventory: 2000 Report (EPA-841-R-02-001), visit www.epa.gov/305b or call the EPA's National Service Center for Environmental Publications at 1-800-490-9198.